

Conference Reports

3rd International FESTEM Symposium

Recent Advances in Trace Element Research: From Experiments to Nutritional and Clinical Applications in Humans

Santiago de Compostela, Spain, May 16th–19th, 2007

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The Federation of European Societies on Trace Elements and Minerals (FESTEM¹), in assistance with the Spanish Society for Clinical Chemistry and Molecular Pathology (SEQCET) and the University of Santiago de Compostela, has organised its third symposium on 'Recent Advances in Trace Element Research: From Experiments to Nutritional and Clinical Applications in Humans' from 16th to 19th May 2007 in Santiago de Compostela.

The aim of FESTEM is to increase the collaboration, the diffusion and the exchange of information on scientific activities of participating Societies (see footnote). The third meeting of FESTEM was attended by approximately 150 registered participants from more than 15 countries of the world. Around 25 lectures and more than 100 posters demonstrated the high interest which is meanwhile focused on trace elements for medical applications, with special reference to nutritional and clinical applications. The programme of the meeting was divided into 9 sessions:

- Trace element analysis and speciation
- Trace elements in molecular biology
- Trace elements in children
- Trace elements and neuro-degenerative diseases
- Trace elements in pathologies
- Iron and metabolic diseases
- Selenoproteins in brain development and function
- Trace elements in the environment
- Trace elements in foods and trace element supplementation

Additionally, two round tables, chaired by Labcatal and Bayer, took place:

- Trace elements, metabolic syndrome and diabetes
- Trace elements in the prevention of cognitive decline

** In Santiago de Compostela, Bernhard Michalke was elected the new president of FESTEM.

¹ The Federation of European Societies on Trace Elements and Minerals (FESTEM) is a non-profit organization founded in Rome in 1997, under the initiative of three Societies from Italy (Associazione Italiana per lo Studio degli Elementi in Traccia negli Organismi Viventi, AISETO), Germany (Gesellschaft für Mineralstoffe und Spurenelemente, GMS), and from the French speaking countries (Societe Francophone d'Etude et de Recherche sur les Elements Trace Essentiels, SFERETE). Two other Societies joined the Federation in 2002, one from Spain (Comission de elementos traza de la Sociedad Espanola de Bioquimica Clinica y Patologia Molecular, SEQCET) and one from Russia (Russian Society of Trace Elements in Medicine, RUSTEM).

The following general outcomes of the meeting can be stated:

1. According to the partially high contamination of different compartments of the human environment, intensified research into clinical, nutritional and environmental chemistry has to be undertaken.
2. A more interdisciplinary approach between natural sciences and medicine has to be used to achieve a more effective integration of medicine, toxicology and ecology.
3. Intensified training of students in toxicological chemistry and medicine, and related subjects on a theoretical and experimental/practical manner, is essential.
4. A strong hand in hand work between industrial, educational and public institutions has to preserve human health.

The abstracts of all presentations have been published in *Quimica Clinica* 2007, 26 (S1) as a special supplement of the Journal of the Spanish Society for Clinical Chemistry and Molecular Pathology. A special issue of the Journal of Trace Elements in Medicine and Biology will be published with a selection of papers presented at the meeting.

Now for the third time, FESTEM distributed a prize and medal in order to reward a scientist for his/her outstanding contribution in the field of trace element and mineral research. The prize is known as 'Gabriel Bertrand', in honour of the famous French scientist, and sponsored by the pharmaceutical company Labcatal. This year, the winner was Prof. Dr. Peter Brätter, em. Professor at the Technical University of Berlin and em. Head of the department 'Trace Elements in Health and Nutrition' at the Hahn-Meitner Institute, Berlin.

Additionally, three poster prizes have been awarded by FESTEM to the amount of 250 Euros each. The winners were:

- Fernandez Sanchez ML, Bermejo Barrera P, Szpunar J, Bermejo Barrera A and Lobinski R, from Madrid and Santiago de Compostela (Spain) and Pau (France) for 'Speciation of iodine in human milk and infant formulas'
- Claeys R, from Grenoble (France) for: 'Effect of zinc deficiency on insulin resistance after burn injury in rats'
- Calatayud M, Torres S, Devesa V, Velez V, Virseda JR, Anton A, Barbera R and Montoro R, from Burjassot (Spain) for: 'Bio-availability of mercury and selenium in seafood products'

The fourth meeting will take place in 2010 in Russia. The Russian Trace Element Society RUSTEM will organise the fourth FESTEM Symposium in Suzdal, a beautiful city approximately 200 km east of Moscow, during May 2010.